IX. On the British Species of the Genus Gelechia of Zeller. By J. W. Douglas, Esq. (Continued from page 21.)

[Read 6th May, 1850.]

Sp. 61. Mulinella.

G. mulinella (Tis.), Z.

Re. interrupta, Haw. (non Ti. interruptella, H.)

An. interruptella, St.

G. interruptella, Sta. (Cat.)

"Alis anticis griseo-fuscescentibus, dorso obscuriore, vitta media obsoleta fusca, pustulis marginis postice subquatuor nigricantibus." (Tis. MSS.)

Head ashy-fuscous; palpi fuscous; antennæ brown-black; thorax darker than the head. Anterior wings greyish fuscous, darker in the inner margin, with a dark, not well defined vitta in the centre, and a few very small black dots on the posterior margin. Posterior wings greyish-fuscous.

This species is very like *Ti. interruptella*, H., but is held to be distinct from it by the continental entomologists, who take both. The most apparent difference is that the ground colour of the wings of *mulinella* is darker, and the central vitta is less clearly defined than in *interruptella*.

Not scarce in July on furze bushes and broom; from the latter I have reared this species.

Sp. 62. Divisella, mihi.

Alæ anticæ griseo-luteæ, dimidio inferiori griseo-fuscæ, punctis tribus atris, uno minimo humerali, altero majori ante, tertioque post medium: alæ posticæ griseo-fuscæ.

Expansion of wings $7\frac{1}{2}$ lines.

Head, palpi and thorax luteous; antennæ luteous, faintly annulated with fuscous. Anterior wings luteous, the lower half shaded with fuscous; cilia luteous; on the shoulder near the costa is a very small dark dot; another, larger, lies in the groove before the middle, and a third opposite the anal angle half way between the anterior and inferior margins. Posterior wings greyish, with luteous cilia; body fuscous. Posterior legs and tarsi

luteous. This species resembles mulinella and interruptella, but is truly distinct.

Taken near Whittlesea Mere. In the collections of Messrs. Doubleday, Shepherd and Allis.

Sp. 63. Næviferella.

G. næviferella, Z.

Ti. Knockella, Haw. (non F.)

G. Knockella, Sta. (Cat.)

Ti. miscella, Haw. (non H. 273.)

Micros. aurofasciella, St.

G. aurofasciella, Sta. (Cat.)

"Alis anticis nigricantibus, maculis tribus posticis; una dorsali, unaque minore disci aureis, una costali pallida." Z.

Expansion of wings, 4½ lines.

Head and thorax concolorous with the anterior wings; palpi black; antennæ faintly annulated black and white. Anterior wings shining greenish-black, with three golden spots, of which one is in the middle of the inferior margin, one on the costa towards the apex, and the other between them: another evanescent yellowish spot may also generally be seen at the anal angle extending into the cilia; it is more conspicuous when the wings are closed. Posterior wings fuscous.

The colours of this species fade much after death, rendering it difficult to describe.

Found on Atriplex erecta at Charlton sandpit in July; also in hedges at Camberwell.

Sp. 64. Fugitivella.

*G. fugitivella, Z.
G. fugacella, Sta. (Cat.)

Expansion of wings, 6 lines.

Head ashy; palpi griseous, terminal joint black in the middle and at the tip; antennæ black, faintly annulated with griseous; thorax griseous. Anterior wings griseous, with some raised scales on the disk; near the base is an oblique black streak, two black spots on the costa, one before, the other beyond the middle, and some scattered black dots on the disk. Posterior wings greyfuscous.

Varies considerably in the colour of the anterior wings, some-

times even to black, so that no markings are visible, the base and apex, however, being mostly paler than the rest of the wing.

Not rare on fences under elm trees at Camberwell in July.

This species is exceedingly like G. fugacella, Z., and not easy to distinguish from it. Herr Zeller, however, assures me it is quite distinct, fugacella being rather larger, and having broader anterior wings: it is not yet discovered in this country.

Sp. 65. Desertella, Edleston (MSS.)

Alæ anticæ angustæ, luteo-fuscæ vel luteæ, punctis quatuor nigris, apicibus punctis nigris circumdatis. Alæ posticæ griseæ, apicibus acuminatis.

Expansion of wings, 6 lines.

Head, palpi and thorax luteous; antennæ annulated black and white. Anterior wings narrow, linear, in colour varying from light to dark luteous, and in some cases nearly fuscous, with four black dots, of which one, faint, lies in the groove near its base; another, also in the groove, before the middle; the third, near it, but above and beyond; and the fourth, in a line with the third, still further removed; the apex surrounded with black dots. Posterior wings greyish, with the apices acute. Body light fuscous. Legs luteous.

Very like G. terrella, but smaller, unvarying in size, and without a trace of a fascia; also the apex of the posterior wings is more acute, and not so gradually produced.

Found abundantly in the sand hills at New Brighton and near Weymouth in June and July. Herr Zeller has sent me a specimen of his variety α of G. terrella, which agrees in most respects with this species, except that it has a faint fascia, a character which I have never seen in any one of the multitude of desertella I have observed.

Sp. 66. Ligulella.

*G. ligulella, Z.

Ti. ligulella, W. V.

Harp. albistrigella, St.?

Expansion of wings, 6 lines.

Anterior wings black, with a whitish fascia just beyond the middle, curving slightly *outwards*, opposite to which, on the under side, is a small yellowish costal spot. Posterior wings fuscous.

Found in several places near London.

Sp. 67. Vorticella.
G. vorticella, Z.
Ti. vorticella, Scop.?

Expansion of wings, 51 lines.

Anterior wings black, with a snow-white fascia just beyond the middle, curving slightly *inwards*, opposite to which, on the under side, is a white costal spot. Posterior wings fuscous black.

Exceedingly like ligulella; but it differs in being smaller, blacker, the fascia curving slightly from, not to, the anal angle, and the spot underneath being white, not yellowish. I have long doubted if these species were distinct, but I now believe they are so. Herr Zeller informs me that he rears plenty of vorticella from the larvæ found on Genista tinctoria, but not one ligulella among them, nor does he even take the latter near Glogau. I would advise any one who has the two species to place them and also tæniolella side by side, when the difference will be more apparent. From tæniolella, vorticella is at once separated by the want of the fascia on the underside, and from ligulella by its smaller size, darker colour and whiter spot underneath.

In Mr. Stephens's cabinet, and found by Mr. Weir in Sussex.

Sp. 68. Coronillella.
G. Coronillella, Z.
Lita Coronillella (Tis.) Tr.

Expansion of wings, 6 lines.

Anterior wings black, with a small yellow costal spot, and another, very small, opposite to it in the anal angle. Posterior wings fuscous, very broad, with the apex long, acute, and very abruptly produced. Body and posterior legs fuscous.

I took this species on the 30th May, by sweeping in the hilly field in Headly Lane, Mickleham.

Sp. 69. Hübneri. Re. Hübneri, Haw. (non Ti. granella, H.) An. Hübneri, St., Wood, 1211.

Expansion of wings, 5½ lines.

Head white; palpi white, terminal joint black; antennæ annulated, black and white; thorax ashy white. Anterior wings ashy white, with two cloudy fasciæ, in which are some black marks, one of the most conspicuous being in the first fascia on the costa;

apex clouded and margined with black dots, cilia fuscous. Posterior wings dark griseous, with fuscous cilia.

This species is rare, and I do not know the places of its capture. It is in the collections of Messrs Doubleday and Shepherd, and Haworth's specimen is in the collection of the Entomological Society.

Sp. 70. Mundella, mihi.

Alæ anticæ griseæ vel cinereæ, costâ plerumque pallidiori, puncto humerali tribusque in disco atris, apicibus ciliisque fuscis. Alæ posticæ griseæ.

Expansion of wings 5 lines.

Head and thorax griseous; palpi griseous, terminal joint black; antennæ black. Anterior wings griseous or cinereous, generally paler on the costa, a humeral spot and three on the disk black, of these three, one lies in the groove, and two above and beyond; the apex either wholly fuscous or only surrounded by black dots; cilia fuscous, with a griseous tinge at the extremity. Posterior wings griseous.

This pretty species is found on the sand hills at New Brighton, Cheshire, in June.

Sp. 71. Suffusella, mihi.

Alæ anticæ angustæ, pallidè luteæ, griseo-fusco suffusæ, punctis duobus elevatis atris, uno costali, alteroque opposito in disco pone medium; ciliis luteis. Alæ posticæ griseæ, ciliis luteis. Expansion of wings, 6 lines.

Head and thorax pale luteous; palpi pale luteous, with the tip of the terminal joint black. Anterior wings narrow, pale luteous, suffused more or less with greyish fuscous, palest on the costa, with two raised black dots, of which one is on the costa, the other below it, opposite the anal angle, exactly half-way between the anterior and inferior margins; cilia luteous. Posterior wings griseous, with luteous cilia. Posterior legs luteous, tarsi spotted with black.

In the collection of Mr. Shepherd, from Whittlesea Mere.

Sp. 72. Pernigrella, Stainton (MSS.)

Alæ anticæ immaculatæ atræ, fasciâ suffusâ aterrimâ pone medium. Alæ posticæ nigræ.

Expansion of wings, 6 lines.

Head, antennæ and thorax jet black; palpi fuscous, with black tips. Anterior wings jet black, spotless, with a still darker fascia

beyond the middle, not easily seen. Posterior wings and body dark fuscous.

This species must be closely allied to G. subsequella, F. v. R., and G. Temerella, Lienig, but from both of which it essentially differs, in being entirely without a spot of any colour.

In the collection of Mr. Edleston, and reared in July by Mr. Gregson, from larvæ found by him on sallows at New Brighton, Cheshire.

Sp. 73. Inornatella, mihi.

Alæ anticæ luteæ, atomis fusco-griseis irroratæ, punctis tribus atris, quorum duo ante, tertiamque pone medium, plagâque obliquâ apicali fuscâ. Alæ posticæ griseæ.

Expansion of wings, 7 lines.

Head and palpi luteous; antennæ luteous, annulated with fuscous. Anterior wings luteous, dusted throughout with griseous atoms, on the disc are three black spots, each surrounded by a pale ring, of which the first is in the groove, the second above it, both before the middle, and the third in a line with the second beyond the middle; from the apex a fuscous dash stretches obliquely towards the centre, and a few dark dots are on the posterior margin. Posterior wings griseous.

In the collections of Messrs. Doubleday and Shepherd, from Whittlesea Mere.

Sp. 74. Gerronella, Z. (MS.)

Alæ anticæ ochraceæ, punctis tribus medio atris, puncto minimo versus basin, alteroque majori margine inferiori, lineâ curvâ costæ bis connexâ, fasciâ obliquâ ad angulum posticum, alterâque rectâ juxta marginem posteriorem, ferrugineis; ciliis ferrugineis. Alæ posticæ griseæ.

Expansion of wings $5\frac{1}{2}$ lines.

Head and thorax deep ochreous; palpi lighter; antennæ ferruginous. Anterior wings deep ochreous, with three black central spots, a small spot near the base, and one on the inner margin, ferruginous; above this last, on the costa, commences a thick lunate line of the same colour, which extends to beyond the middle, where it again joins the costa, leaving the clear ground colour within the curve; joined to its outer end a fascia stretches obliquely to the anal angle, where it is met by a thick, still darker fascia going along but not touching the posterior margin, between

which and the dark cilia an ochreous line is perceptible. Posterior wings griseous.

Taken at Charlton, in July and August.

Sp. 75. Inopella.
G. inopella, Z.
Aphelosetia? Inulella, Curt. Ann. and Mag. N.
Hist. ser. 2, vol. v. p. 117.

"It expands five lines and is white; scales on head depressed; palpi recurved, scaly to the apex; superior wings narrow, lanceolate, ochreous and freckled; costa, a line along the middle, with the radiating nervures and inferior margin white, and sometimes there is an oblique white stripe near the inner angle directed towards the tip; cilia long, pale, and dotted at the base; inferior wings silky, dove-colour, nearly as broad as the superior, truncated at the extremity, the apex produced; cilia long and thick; hinder tibiæ stout, with hairy scales.

"Very like A. rufo-cinerea, Haw., at first sight, but besides other differences, the under wings are not lanceolate, which indicates an affinity to Cleodora. I bred two from flowers of Inula dysenterica, the 28th of August, 1848, collected near Ryde in the Isle of Wight, and no doubt the caterpillars fed upon the seeds in the receptacles."—Curtis, loc. cit.

Sp. 76. Bifractella. G. bifractella, Mann. (MS.)

Caput testaceum, palpi ochraceæ. Alæ anticæ brunneo-nigræ, maculis duabus posticis obliquè oppositis ferè confluentibus, fulvis. Alæ posticæ nigræ.

Expansion of wings 5-6 lines.

Head testaceous; face and palpi paler; antennæ black. Anterior wings brown-black, with two nearly opposite fulvous spots, one on either margin towards the apex, generally connected by a curved line. Viewed with a lens these wings are dusted with griseous atoms. Posterior wings black. Posterior tarsi black, annulated with white.*

^{*} In July and August this year I reared this species, and also G.inopella preceding, from the dry receptacles of the flowers of Inula dysenterica, gathered last winter at Folkestone.—J. W. D. 6th Sept. 1850.

Sp. 77. Littorella, mihi.

Alæ anticæ angustæ, albidæ, punctis quinque fuscis; ciliis griseis Alæ posticæ pallidè griseæ.

Expansion of wings 5 lines.

Head, palpi and thorax concolorous with the anterior wings; antennæ fuscous. Anterior wings ashy-white, with five fuscous spots, two of them pale before the middle, two central, and one beyond the middle; cilia griseous. Posterior wings pale griseous. Body fuscous; posterior legs and tarsi ashy.

Found by Mr. S. Stevens in May on the coast of the Isle of Wight.

Sp. 78. Immaculatella, mihi.

Alæ anticæ sericeæ, immaculatæ, nigræ. Alæ posticæ griseæ.

Expansion of wings 5 lines.

Head, palpi, antennæ and thorax concolorous with the anterior wings, which are of an uniform blue-black and without any spot. Body black; posterior legs and tarsi pale griseous.

Of this very distinct species I have a single specimen which I caught flying in West Wickham Wood, August, 1849.

Sp. 79. Fumatella, mihi.

Alæ anticæ fumato-griseæ, punctis tribus aliquantulum elevatis, fascia obscura sinuata grisea; ciliis griseo-sparsis. Alæ posticæ griseæ.

Expansion of wings 7 lines.

Head and thorax concolorous with the anterior wings; palpi paler, darker just before the tip; antennæ fuscous. Anterior wings smoky-grey, brown, with three black spots somewhat raised, an obscure wavy greyish fascia; the posterior margin pale, dotted with black; cilia dusted with ashy. Posterior wings griseous, with paler cilia. Body fuscous; posterior tarsi spotted with black.

Mr. Gregson took three of this species at New Brighton, and very liberally gave me one. Mr. Stainton has also received it from Mr. Jordan, by whom it was captured in Devonshire.

Sp. 80. Senectella. G. senectella, Z.

Expansion of wings 6 lines.

Head fuscous or greyish fuscous; palpi griseous, the tip darker; antennæ fuscous. Anterior wings acute, fuscous, with lighter cilia, and three very obscure black central dots. Posterior wings shining, dark griseous. Considerably like the dark varieties of G. terrella, but smaller; anterior wings more acute, and the posterior more produced at the apex, as observed by Herr Zeller (Isis, 1839).

Some of my specimens differ from this description, inasmuch as all the wings and the terminal joint of the palpi are nearly black, but I do not see in them sufficient difference to constitute a distinct species.

Found on the downs at Stoat's Nest in thatch, and flying, also at West Wickham Wood, in July and August.